**ATTACHMENT J12**

# Salt Lake City IAP (ANG), Utah Electric Distribution System

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## J12.1 Salt Lake City IAP (ANG), Utah Overview

Salt Lake City (SLC) is located in north central Utah immediately southeast of the Great Salt Lake. The Utah Air National Base (UTANG) lies within the boundary of the Salt Lake City International Airport (SLCIAP) along a portion of the eastern segment of the SLCIAP. The airport is owned by the city and base property is leased. The UTANG Base is home to the 151st Air Refueling Wing and occupies approximately 135 acres of the SLCIAP's five square miles of land. Their mission is to organize, train, and equip KC-135 aircraft personnel to provide in-flight refueling support on a worldwide basis and be prepared to respond to state emergencies and natural disasters. The base has a total 63 buildings: 3 services, 13 administrative, and 47 industrial buildings, amounting to approximately 407,000 square feet. There are 255 full-time personnel and 1,343 personnel during the once a month unit training assemblies. There are several new construction and demolition projects in progress or in the planning stages to modernize the base and remove vintage 1943 buildings. These projects include construction of a composite operations and training/squadron operations complex, an aircraft maintenance facility; a base supply complex and a new fire station: When all construction is complete the base will net approximately 99,759 square feet of new facility space with no increase of personnel.

## J12.2 Electric Distribution System Description

### J12.2.1 Electric Distribution System Fixed Equipment Inventory

The Salt Lake City IAP (ANG), Utah electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, ductbanks, vaults, meters, and switches. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

- Airfield Lighting
- Parking Lot Lights
- Street Lights
- Ballfield Lights

- An overhead electrical circuit runs approximately 1650 LF and parallel to a drainage canal from the airport's pump house station on the west side of the base, along the south side of 5th Street and under Tanker Way Street to an oil water separator unit at the east side of the base. There are 5 wooden utility poles and one service drop to a meter on a pole behind the base's RV storage lot. The meter is for the oil water separator unit. The poles, wiring, and meter are owned by the airport authority. Although this system traverses UTANG leased property, it is not physically connected to the UTANG electrical system and is not part of this privatization effort.

### J12.2.1.1 Description

Electrical power for Salt Lake City IAP (ANG) enters the base at a single location underground near the south gate. The nominal system voltage is 12470Y/7200 volts. There are approximately 14,900 linear feet of circuits that are 100% underground and in duct banks. Configuration is primarily delta connected with some wye connected on the secondary feeds. Electric power is distributed by an underground branch system that can be controlled by 10 pad mounted sectionalized switches. There are 7 pad mounted single phase 50 kVA transformers, 19 three phase transformers ranging from 75 to 1000 kVA and 35 electric meters. The ductbanks are buried at an average depth of three feet with warning tape buried approximately 12" below surface grade. There are no substations or unique components associated with this system. Base personnel indicate the system capacity is adequate to meet current and future demands.

### J12.2.1.2 Inventory

**Table 1** provides a general listing of the major electric distribution system fixed assets for the Salt Lake City IAP (ANG), Utah electric distribution system included in the sale.

**TABLE 1**
Fixed Inventory
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| **Underground Circuits** | AWG | Length (ft) | | |
| **3 ph, 4w, 15000v in conduit** | #500 | 500 | LF | 1970 |
| **3 ph, 4w, 15000v in conduit** | #4 | 500 | LF | 1985 |
| **3 ph, 4w, 15000v in conduit** | #1 | 350 | LF | 1989 |
| **3 ph, 4w, 15000v in conduit** | #1 | 890 | LF | 1991 |
| **3 ph, 4w, 15000v in conduit** | #1 | 10,160 | LF | 1997 |
| **3 ph, 4w, 15000v in conduit** | #2 | 2500 | LF | 1997 |
| **Ductbanks** | | | | |
| **1 EA 2" PVC in concrete (Note)** | 8"x8" | 500 | LF | 1970 |
| **1 EA 2" PVC in concrete (Note)** | 8"x8" | 500 | LF | 1985 |
| **1 EA 4" PVC in concrete (Note)** | 10"x 10" | 350 | LF | 1989 |
| **1 EA 4" PVC in concrete (Note)** | 10"x 10" | 890 | LF | 1991 |

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| **1 EA 4" PVC in concrete (Note)** | 10"x 10" | 10,160 | LF | 1997 |
| **1 EA 2" PVC in concrete (Note)** | 8"x8" | 2500 | LF | 1997 |
| | | | | |
| **Transformers** | Nom kVA | | | |
| **3 phase, pad mounted** | 75 | 1 | EA | 1988 |
| **3 phase, pad mounted** | 75 | 1 | EA | 1997 |
| **3 phase, pad mounted** | 75 | 1 | EA | 1999 |
| **3 phase, pad mounted** | 112.5 | 3 | EA | 1997 |
| **3 phase, pad mounted** | 150 | 1 | EA | 1988 |
| **3 phase, pad mounted** | 150 | 1 | EA | 1993 |
| **3 phase, pad mounted** | 300 | 1 | EA | 1973 |
| **3 phase, pad mounted** | 300 | 1 | EA | 1979 |
| **3 phase, pad mounted** | 300 | 1 | EA | 1991 |
| **3 phase, pad mounted** | 300 | 1 | EA | 1993 |
| **3 phase, pad mounted** | 300 | 2 | EA | 1994 |
| **3 phase, pad mounted** | 300 | 4 | EA | 1997 |
| **3 phase, pad mounted** | 1000 | 1 | EA | 1971 |
| | | | | |
| **1 phase, pad mounted** | 50 | 1 | EA | 1990 |
| **1 phase, pad mounted** | 50 | 1 | EA | 1992 |
| **1 phase, pad mounted** | 50 | 1 | EA | 1993 |
| **1 phase, pad mounted** | 50 | 1 | EA | 1994 |
| **1 phase, pad mounted** | 50 | 1 | EA | 1996 |
| **1 phase, pad mounted** | 50 | 2 | EA | 1997 |
| | | | | |
| **Switches Underground** | Type | | | |
| **Medium voltage S&C Model PMS12, 200amp, 3 pole** | 3 way | 10 | EA | 1997 |
| **Sectionalizer, 2'x4'x2'** | 4 way | 2 | EA | 1989 |
| **Sectionalizer, 2'x4'x2'** | 3 way | 3 | EA | 1989 |
| **Sectionalizer, 2'x4'x2'** | 3 way | 1 | EA | 1998 |
| | | | | |
| **Electric Meters** | 3 Phase | 35 | EA | |

| Item | Size | Quantity | Unit | Approximate Year of Construction |
|---|---|---|---|---|
| **Vaults** | Type | | | |
| **Manholes, Pre-cast concrete** | 6'x6'x6' | 1 | EA | 1997 |
| **Handholds, Pre-cast concrete** | 3'x3'x3' | 2 | EA | 1997 |

Notes:

PVC = Polyvinyl Chloride
AWG = American Wire Gauge
EA = each
LF = linear feet
Nom kVA = nominal kilovolt-amperes
v = volts

Note: PVC conduit encased in concrete, colored red and covered with 3" of sand with warning tape buried approximately 12" below surface grade.

## J12.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**
Spare Parts
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Qty | Item | Make/Model | Description | Remarks |
|---|---|---|---|---|
| None | | | | |

**TABLE 3**
Specialized Vehicles and Tools
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Description | Quantity | Location | Maker |
|---|---|---|---|
| None | | | |

## J12.2.3 Electric Distribution System Manuals, Drawings, and Records

**Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**
Manuals, Drawings, and Records
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Qty | Item Description | Remarks |
|---|---|---|
| 1 | Electrical Utility System Maps (electronic copy) | AutoCAD Release Version 2000 |

# J12.3 Specific Service Requirements

The service requirements for the Salt Lake City IAP (ANG), Utah electric distribution system are as defined in the Section C Description/Specifications/Work Statement.

# J12.4 Current Service Arrangement

- Provider Name: Utah Power and Light
- Average Annual Usage: 3,645,355 kWh (1999)
- Maximum Monthly Use: 469,200 kWh
- Minimum Monthly Use: 212,000 kWh
- Peak demand: 1,336 kW

# J12.5 Secondary Metering

## J12.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J12.6 below.

**TABLE 5**
Existing Secondary Meters
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Meter Location | Meter Description |
|---|---|
| **Building or Facility Number** | **Example: 3 phase or 1 phase, kWh** |
| 1 | 3 phase kWh |
| 2 | 3 phase kWh |
| 3 | 3 phase kWh |
| 3 (Pad mounted transformer mounted) | 3 phase kWh |
| 4 | 3 phase kWh |

| | |
|---|---|
| 7 | 3 phase kWh |
| 10 | 3 phase kWh |
| 19 | 3 phase kWh |
| 23 | 3 phase kWh |
| 25 | 3 phase kWh |
| 37 | 3 phase kWh |
| 40 | 3 phase kWh |
| 45 | 3 phase kWh |
| 50 | 3 phase kWh |
| 106 | 3 phase kWh |
| 112 | 3 phase kWh |
| 208 | 3 phase kWh |
| 215 | 3 phase kWh |
| 218 | 3 phase kWh |
| 301 | 3 phase kWh |
| 302 | 3 phase kWh |
| 303 | 3 phase kWh |
| 408 | 3 phase kWh |
| 1522 | 3 phase kWh |
| 1604 | 3 phase kWh |
| 1604 (Pad mounted transformer mounted) | 3 phase kWh |
| 1605 | 3 phase kWh |
| 1624 | 3 phase kWh |
| 1628 | 3 phase kWh |
| 1708 | 3 phase kWh |
| 1709 | 3 phase kWh |
| 1709 (Pad mounted transformer mounted) | 3 phase kWh |
| 1713 | 3 phase kWh |
| (1) North side of Radar Site (no facility #) | 3 phase kWh |
| (1) South side of Radar Site (no facility#) | 3 phase kWh |

## J12.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13 Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J12.6 below.

**TABLE 6**
New Secondary Meters
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Meter Location | Meter Description |
|---|---|
| None | |

# J12.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.

4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

# J12.7 Energy Saving Projects

IAW Paragraph C.3 Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes. None

# J12.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Salt Lake City IAP (ANG), Utah boundaries.

# J12.9 Off-Installation Sites

No off-installation sites are included in the sale of the Salt Lake City IAP (ANG), Utah electric distribution system.

# J12.10 Specific Transition Requirements

IAW Paragraph C.13 Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

**TABLE 7**
Service Connections and Disconnections
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Location | Description |
|---|---|
| None | |

# J12.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Salt Lake City IAP (ANG), Utah electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and replacement projects will be recovered through Sub-CLIN AB.

**TABLE 8**
System Deficiencies
Electric Distribution System Salt Lake City IAP (ANG), Utah

| Project Location | Project Description |
|---|---|
| None | |